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Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
_	09/471,816	12/22/99	BERTINI	G UTLX114698 EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 09/471,816

Applicant(s)

Bertini et al.

Examiner

Chau Nguyen

Group Art Unit 2831



Responsive to communication(s) filed on	•
☐ This action is FINAL .	
☐ Since this application is in condition for allowance exce in accordance with the practice under Ex parte Quayle,	ept for formal matters, prosecution as to the merits is closed , 1935 C.D. 11; 453 O.G. 213.
	set to expirethree month(s), or thirty days, whichever ailure to respond within the period for response will cause the xtensions of time may be obtained under the provisions of
Disposition of Claims	
	is/are pending in the application.
Of the above, claim(s)	is/are withdrawn from consideration.
☐ Claim(s)	is/are allowed.
	is/are rejected.
Claim(s)	is/are objected to.
	are subject to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Dr	rawing Review, PTO-948.
☐ The drawing(s) filed on is/are of	objected to by the Examiner.
☐ The proposed drawing correction, filed on	is ppproved disapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examin	ner.
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign pri	iority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED cop	pies of the priority documents have been
☐ received.	
received in Application No. (Series Code/Seria	
received in this national stage application from	
*Certified copies not received: Acknowledgement is made of a claim for domestic;	
Acknowledgement is made of a claim for domestic p	priority under 35 0.3.C. 3 119(e).
Attachment(s)	
☒ Notice of References Cited, PTO-892☒ Information Disclosure Statement(s), PTO-1449, Page	ner No(s) 03
☐ Interview Summary, PTO-413	301 110(3). <u>00</u>
☐ Notice of Draftsperson's Patent Drawing Review, PT	го-948
☐ Notice of Informal Patent Application, PTO-152	
SEE OFFICE ACTION	ON THE FCLLOWING PAGES

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DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c). The residence of inventor Stagi has been altered without an initial.

Drawings

- 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the feature of a second conduit having open ends, each open end adapted to receive the interior end of the second cable must be shown or the feature canceled from claims 13 and 24. No new matter should be entered.
- 3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "176". Correction is required.

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4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: "204". Correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 6. Claims 1-13 and 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not provide a written description to describe how each end of the conduit is adapted to receive an interior end of the first cable as claimed in claim 1 because the first cable has only one interior end. The specification also does not provide a written description to describe how each open end of the second conduit is adapted to receive an interior end of the second cable as claimed in claims 13 and 24 since the cable has only one interior end.
- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 1-13, 17, and 23-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, lines 4-5, the recitation "each open end of the conduit adapted to receive the interior end of the first information transmitting cable" is indefinite since the first cable has only one interior end.

Claim 6, line 2, "within" should be deleted.

Claim 12, lines 3-4, the recitation "the second information transmitting cable adapted to be received within the other of the conduit" is indefinite since claim 1 recites that each open end of the conduit is adapted to receive the interior end of the first information transmitting cable.

Claim 13, line 1, "a second conduit" is indefinite since "a first conduit" has not been recited.

Claim 13, lines 2-3, the recitation "each open end of the second conduit adapted to receive the interior end of the second information transmitting cable" is indefinite since the second cable has only one interior end.

Claim 17, line 2, "within" should be deleted.

Claim 23, line 3, "the other of the open ends of the sleeve" is unclear to how this open end relates to the "first and second open ends" recited in claim 14.

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Claim 24, lines 2-3, the recitation "each open end of the second sleeve adapted to receive the interior end of the second electrical cable" is indefinite since the second cable has only one interior end.

Claim 25, line 11, after "conductor" insert --which is-- to clear that the conductor contact is attached to the central conductor and not the second end.

Claim 28, line 2, delete "within".

Claims 2-5, 7-11, 26, 27, and 29-33 are included in this rejection because of dependency.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claims 1, 2, 10, 12, 14, 21 and 23, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Reymaert (4,943,685).

In this rejection, it is assumed that each interior end of the first and second cables is respectively received in each of the open ends of the conduit.

Reymaert discloses a connector for a first information transmitting cable (12) which has an outer surface, an interior end, an exterior end, and a central conductor portion (16), the connector comprising a conduit (sleeve 26) having open ends (first and second), one of the open

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ends adapted to receive the interior end of the first cable, the conduit including a hollow interior to permit the passage of a fluid (34) therethrough, and the conduit being capable of forming a fluid tight seal between the conduit and a portion of the first cable (claim 1). Reymaert also discloses the conduit comprising an injection port (36) to provide fluid communication with the hollow interior of the conduit and pass fluid therethrough and into the central conductor of the first cable (claims 2&14), an insulation sleeve (22) adapted to cover the central portion of the first cable wherein the conduit is located on the insulation sleeve to create a fluid tight seal therebetween (claims 10&21), a second cable (14) having an outer surface, an interior end and a central conductor portion and being adapted to be received within the other open end of the conduit, and both of the cables being electrical cables (claims 12&23).

11. Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Iversen (3,816,641).

Iversen discloses a connector (fig. 5) for passing repair chemical through at least a first cable which has an outer surface, an interior end, an exterior end (the left side of the cable) and a central conductor portion, the connector comprising a cable adapter (32) attachable to the outer surface of the first cable, the adapter located on the outer surface at a position remote from the exterior end of the cable to leave exposed a portion of the outer surface of the cable adjacent the exterior end thereof, a sleeve (86) having a first end, a second end, a fluid injection port and a hollow interior, the first end (the right side of the sleeve 86) of the sleeve adapted to fit over the exposed portion of the outer surface of the cable adjacent the exterior end thereof, and the second

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end of the sleeve adapted fit over a conductor contact (18,52) which is attached to the central conductor portion of the cable such that the sleeve creates a fluid tight seal for the passage of repair fluid into the port.

Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 13 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert.

In this rejection, it is assumed that a second conduit is used to connect the second cable with another (a third) cable.

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Reymaert discloses the invention as claimed in claims 12 and 23 except for a second conduit connecting the second cable with another (a third) cable (claims 13 and 24). However, it would have been obvious to one skilled in the art to use another (a second) conduit for connecting the second cable (14) with another (a third) cable to splice a plurality of cables since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art. St. Regis Pater Co. v. Bemis Co., 193 USPQ 8.

14. Claims 3, 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Tepel (2,247,671).

Claims 3, 4 and 15 in addition to the limitations of claims 1 and 14 recite the injection port being an internally threaded opening and an internally threaded plug sealingly received within the port. Tepel discloses a connector for cable comprising an injection port (46) which is an internally threaded opening, and an internally threaded plug (47) is sealingly received within the port. It would have been obvious to one skilled in the art to apply the teaching of Tepel into the Reymaert connector by modifying the port (36) to be an internally threaded opening and the plug (40) to be an internally threaded plug to improve the tighten of the plug within the port.

15. Claims 5-8 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Smith (3,823,254).

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Claims 5-7 and 16-18 in addition to the limitations of claims 2 and 14 recite a tube which is sealingly received within the port and has an angularly disposed fin integrally formed with the tube. Smith discloses a connector comprising a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the plug (40) of Reymaert to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

Claims 8 and 19 additionally recite that there are a plurality of fins integrally formed with the tube. It would have been obvious to one skilled in the art to provide a plurality of fins on the modified tube of Reymaert to improve the tighten of the tube within the port since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art. St. Regis Pater Co. v. Bemis Co., 193 USPQ 8.

16. Claims 9, 11, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Dery et al. (5,006,286).

Claims 9, 11, 20 and 22 additionally recite the conduit (sleeve) being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a conduit (sleeve 102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the conduit (sleeve) of Reymaert such that a

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tight seal between the conduit (sleeve) and the cables is provided without using hose clamps because the heat shrinkable sleeve is heat shrunk onto the cables.

17. Claims 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Hunter (4,764,232).

Reymaert discloses a connector for passing repair chemical through at least a first cable which has an outer surface, an interior end, an exterior end (the left side of the cable) and a central conductor portion, the connector comprising a sleeve (26) having a first end, a second end, a fluid injection port (36) and a hollow interior, the first end (the right side of the sleeve 26) of the sleeve adapted to fit over the exposed portion of the outer surface of the cable adjacent the exterior end thereof, and the second end of the sleeve adapted fit over a conductor contact (cable 12) which is attached to the central conductor portion of the first cable such that the sleeve creates a fluid tight seal for the passage of repair fluid into the port (claim 25). Reymaert also discloses an insulation sleeve (22) adapted to cover the central portion of the first cable wherein the sleeve (26) is located on the insulation sleeve to create a fluid tight seal therebetween (claim 32)

Reymaert does not disclose a cable adapter attachable to the outer surface of the first cable, the adapter located on the outer surface at a position remote from the exterior end of the cable to leave exposed a portion of the outer surface of the cable adjacent the exterior end thereof (claim 25).

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Hunter discloses a cable adapter (24,32) attachable to the outer surface of a first cable, the adapter located on the outer surface at a position remote from an exterior end of the cable to leave exposed a portion of the outer surface of the cable adjacent the exterior end thereof.

It would have been obvious to one skilled in the art to use the cable adapter as taught by Hunter in the connector of Reymaert, such as providing the sleeve (26) of Reymaert between elements 24 and 32 of Hunter, to provide a fluid tight seal between the sleeve and the cable without using hose clamps.

18. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Hunter as applied to claim 25 above, and further in view of Tepel.

Claim 26 additionally recites an internally threaded plug sealingly received within the port.

Tepel discloses a connector for cable comprising an internally threaded plug (47) sealingly received within a port. It would have been obvious to one skilled in the art to modify the plug (40) of Reymaert to be an internally threaded plug as taught by Tepel to improve the tighten of the plug within the port.

19. Claims 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Hunter as applied to claim 25 above, and further in view of Smith.

Claims 27-29 additionally recite a tube which is sealingly received within the port and has an angularly disposed fin integrally formed with the tube. Smith discloses a connector comprising

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a tube (20) which is sealingly received within a port (18) and has an angularly disposed fin (not numbered, fig. 3) integrally formed with the tube. It would have been obvious to one skilled in the art to use the tube as taught by Smith for the plug (40) of Reymaert to improve the sealing at the port since the tube has the fin, it would not be withdrawn from the port easily.

Claim 30 additionally recites that there are a plurality of fins integrally formed with the tube. It would have been obvious to one skilled in the art to provide a plurality of fins on the modified tube of Reymaert to improve the tighten of the tube within the port since it has been held that merely duplicating the essential working part of a device involves only routine skill in the art. St. Regis Pater Co. v. Bemis Co., 193 USPQ 8.

20. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reymaert in view of Hunter as applied to claim 25 above, and further in view of Dery et al.

Claims 31 and 33 additionally recite the sleeve being comprised of a heat shrinkable material. Dery et al. discloses a connector comprising a sleeve (102) which is made of a heat shrinkable material. It would have been obvious to one skilled in the art to use heat shrinkable material as taught by Dery et al. for the sleeve of Reymaert such that a tight seal between the sleeve and the cables is provided without using hose clamps because the heat shrinkable sleeve is heat shrunk onto the cables.

Communication

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21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 308-0693.

Changung Chau Nguyen

Patent Examiner- 2831

May 31, 2000